Background: While ambulatory hemodialysis is a critical, life-saving treatment for patients who require this treatment, the prolonged time patients spend in close proximity to each other during dialysis treatment makes this setting higher risk for transmission of COVID-19 than other ambulatory treatment settings. Dialysis centers therefore need to ensure that they are taking aggressive measures to decrease the risk of transmission of COVID-19. This guideline is designed to be used as a companion to CDC guidance document, *Interim Additional Guidance for Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed COVID-19 in Outpatient Hemodialysis Facilities.*

When to contact Los Angeles County Department of Public Health (LAC DPH)

1. Possible outbreak: if the facility identifies 3 or more new suspect or confirmed cases of COVID-19 in the span of 3 days among patients undergoing dialysis at the center or dialysis center staff.
2. Staff exposure: a single staff member who provided patient care at the dialysis center after developing symptoms of COVID-19 or who worked within 48 hours prior to developing symptoms.

Universal Source Control

To address asymptomatic and pre-symptomatic transmission, ambulatory dialysis centers should implement *source control* measures for everyone entering a dialysis center (e.g., healthcare personnel (HCP), patients, visitors), regardless of symptoms. This action is recommended to help prevent transmission from infected individuals who may or may not have symptoms of COVID-19.

1. Ambulatory dialysis centers should implement policies requiring everyone entering the facility to wear a facemask or cloth face covering while in the building, regardless of symptoms.
2. Patients and visitors should, ideally, be wearing their own masks upon arrival to the facility. If not, they should be offered a facemask or cloth face covering as supplies allow, which should be worn while they are in the facility. They should also be instructed that if they must touch or adjust their mask, they should perform hand hygiene immediately before and after. Follow CDC section on *Universal Source Control* - Patient and Visitor for more guidance.
3. Limit visitors to the facility to only those essential for the patient’s physical or emotional well-being and care (e.g., care partners).
4. HCPs should wear face coverings for universal source control at all times while they are in the dialysis center. Masks or respirators are preferred for patient care activities as they offer both source control and protection for the wearer against exposure to splashes and sprays of infectious material from others, but non-medical face coverings can be used for non-patient care activities. Extended use and reuse of masks and respirators should be done based on principles set forth in prior CDC PPE optimization guidance.

Providing dialysis treatment to patients with confirmed or suspect COVID-19

1. Ambulatory dialysis centers are expected to provide dialysis treatment to patients with confirmed or suspect COVID-19.
2. Patients should not be referred to acute care hospitals if clinically stable enough for dialysis treatment.
3. Ambulatory dialysis centers should have plans to care for patients with confirmed and suspect COVID-19. These plans should ensure the following:
   a. Patients with confirmed or suspect COVID-19 should be dialyzed separately from other patients which can be done by dedicating specific areas (e.g. separate room, placing patients in single bay, placing patient away from main traffic flow), dedicating specific days or times for COVID-19 patients, or creating a COVID-19 designated care site/clinic.
   b. Patients with confirmed or suspect COVID-19 should wear a facemask (as opposed to a cloth face covering) while in the center.
   c. If possible, specific staff should be designated to care for patients with confirmed or suspect COVID-19.

Screening, monitoring and education of patients with confirmed or suspected COVID-19

1. Screen patients for fever (>100.0) and symptoms of COVID-19 (e.g., fever, cough, sore throat, shortness of breath, muscle aches, malaise) prior to entering the dialysis center. In addition, screen patients for signs and symptoms of COVID-19 before they enter the treatment area of the dialysis center.
   a. Patients should inform staff of fever or symptoms of COVID-19 immediately upon arrival at the facility (e.g., when they check in at the registration desk).
   b. Screen patients if they are residents of a skilled nursing facility or assisted living facility with a known COVID-19 outbreak.

2. Instruct patients to call ahead to report fever or symptoms of COVID-19 so the facility can be prepared for their arrival or, if a higher acuity of care is needed, triage them to a more appropriate setting.
   a. Patients should inform staff of fever or symptoms of COVID-19 immediately upon arrival at the facility (e.g., when they check in at the registration desk).
   b. Screen patients if they are residents of a skilled nursing facility or assisted living facility with a known COVID-19 outbreak.

3. Ambulatory Dialysis Centers should provide patients with training materials or instructions about the importance of maintaining a distance of at least 6 feet from all other persons whenever possible, hand hygiene, respiratory hygiene, and cough etiquette.
   a. Training materials and instructions should include how to use cloth face coverings and facemasks, how to use tissues to cover nose and mouth when coughing or sneezing, how to dispose of tissues and contaminated items in waste receptacles, and how and when to perform hand hygiene.
   b. Post signs at clinic entrances with instructions for patients with fever or symptoms of COVID-19 to alert staff so appropriate precautions can be implemented.

4. Facilities should have supplies positioned close to dialysis chairs and nursing stations to ensure adherence to hand and respiratory hygiene, and cough etiquette. These include tissues and no-touch receptacles for disposal of tissues and hand hygiene supplies (e.g., alcohol-based hand sanitizer).

Patient placement for confirmed or suspected COVID-19 individuals in dialysis centers

1. For patient placement, facilities should have space in waiting areas for ill patients to sit separated from other patients by at least 6 feet. Medically stable patients might opt to wait in a personal vehicle or outside the healthcare facility where they can be contacted by mobile phone when it is their turn to be seen.
2. Patients with suspected or confirmed COVID-19 should be brought back to an appropriate treatment area as soon as possible in order to minimize time in waiting areas.

3. Facilities should maintain at least 6 feet of separation between patients with suspected or confirmed COVID-19 and other patients during dialysis treatment. Ideally, patients with suspected or confirmed COVID-19 would be dialyzed in a separate room (if available) with the door closed.

4. Hepatitis B isolation rooms should only be used for dialysis patients with suspected or confirmed COVID-19 if:
   a. the patient is hepatitis B surface antigen positive or
   b. the facility has no patients on the census with hepatitis B infection who would require treatment in the isolation room.

5. If a separate room is not available, the patient with suspected or confirmed COVID-19 should be treated at a corner or end-of-row station, away from the main flow of traffic (if available). The patient should be separated by at least 6 feet from the nearest patient (in all directions).

6. If the patient is unable to tolerate a facemask, then they should be separated by at least 6 feet from the nearest patient station (in all directions).

7. If a hemodialysis facility is dialyzing more than one patient with suspected or confirmed COVID-19, consideration should be given to cohorting these patients and the HCP caring for them together in the section of the unit and/or on the same shift (e.g., consider the last shift of the day). If the etiology of respiratory symptoms is known, patients with different etiologies should not be cohorted (for example, patients with confirmed influenza and COVID-19 should not be cohorted).

**Personal protective equipment for HCP caring for patients with suspected or confirmed COVID-19**

1. Facemask or respirator
2. Eye protection (e.g., goggles or face shields)
3. Gloves
4. Isolation gown

**Discontinuation of Transmission-Based Precautions**

Transmission-based precautions can be discontinued for COVID-19 patients in hemodialysis facilities:

- At least 3 days (72 hours) fever free without fever-reducing medications and improvement in respiratory symptoms; and
- At least 14 days have passed since symptom onset.

**Environmental cleaning**

1. Ensure routine cleaning and disinfection are appropriate for COVID-19 in dialysis settings.
   a. Any surfaces, supplies, or equipment (e.g., dialysis machine) located within 6 feet of suspected or confirmed COVID-19 patients, should be disinfected or discarded appropriately.
   b. Disposable medical supplies brought to the dialysis station should be discarded.
c. All non-dedicated, non-disposable medical equipment used for patient care should be cleaned and disinfected according to manufacturer’s instructions and facility policies.

d. Staff should follow standard operating procedures for the disposal of used PPE and regulated medical waste.

e. If linens or disposable cover sheets are used on the dialysis chairs, follow standard procedures for containing and/or laundering used items.

2. Cleaning agents

a. Products with EPA-approved emerging viral pathogens claims are recommended for use against COVID-19. Refer to List N (https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2) on the EPA website for EPA-registered disinfectants that have qualified under EPA’s emerging viral pathogens program from use against SARS-CoV-2.

b. When using products from List N, facilities should ensure the products also have a bloodborne pathogen claim (e.g., hepatitis B, HIV).

Helpful Resources:


5. American Society of Nephrology: https://www.asn-online.org/ntds/